

Attorney's Docket No. 33339/176332

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Guy Serre et al.

Confirmation No.: 6404

Appl. No.: 09/254,032

Group Art Unit: 16

Filed: April 26, 1999

Examiner: L. Mayes

For: ANTIGENS DERIVED FROM FILAGGRIN  
AND THEIR USE FOR DIAGNOSING  
RHEUMATOID POLYARTHRITIS

FEB 19 2003

TECH CENTER 1600/2900

February 12, 2003

**SUPPLEMENTAL RESPONSE TO COMPLY WITH REQUIREMENTS FOR  
PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE  
AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Commissioner for Patents  
Washington, DC 20231

Sir:

Further to Applicant's Amendment filed January 22, 2003, in the above-referenced application, please replace pages 1-2 of the sequence listing and the computer-readable form as filed March 7, 2001 in the present application with substitute sheets 1-17 of the attached sequence listing and the substitute computer-readable form submitted concurrently herewith.

I hereby state that the substitute copy of the computer-readable form, submitted in accordance with 37 C.F.R. §1.825(b), is the same as the amended sequence listing.

Respectfully submitted,

Melissa B. Pendleton

Attorney/Agent for Applicant

Registration No. 35,459

CUSTOMER NO. 00826  
ALSTON & BIRD LLP  
Bank of America Plaza  
101 South Tryon Street, Suite 4000  
Charlotte, NC 28280-4000  
Tel Charlotte Office (704) 444-1000  
Fax Charlotte Office (704) 444-1111

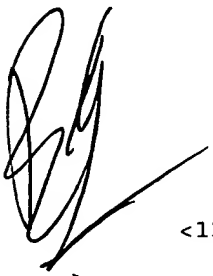
"Express Mail" Mailing Label Number EL910298570US  
Date of Deposit: February 12, 2003

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, DC 20231, on February 12, 2003.

  
Grace R. Rippy



SEQUENCE LISTING



<110> SERRE, Guy  
GIRBAL-NEUHAUSER, Elizabeth  
VINCENT, Christian  
SIMON, Michel  
SEBBAG, Mireille  
DALBON, Pascal  
JOLIVET-REYNAUD, Colette  
ARNAUD, Michel  
JOLIVET, Michel

<120> ANTIGENS DERIVED FROM FILAGGRIN AND THEIR USE  
FOR DIAGNOSING RHEUMATOID POLYARTHRITIS

<130> 33339/176332

<140> 09/254,032

<141> 1999-04-26

<150> PCT/FR97/01541

<151> 1997-09-01

<150> FR96/10651

<151> 1996-08-30

<160> 7

<170> PatentIn version 3.1

<210> 1

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for amplification of a human filaggrin unit.

<400> 1

ttcctataacc aggtgagcac tcat

24

<210> 2

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer for amplification of a human filaggrin unit.

<400> 2

agaccctgaa cgtccagacc gtccc

25

<210> 3

<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 3

Ser Thr Gly His Ser Gly Ser Gln His Ser His Thr Thr Thr Gln Gly  
1 5 10 15

Arg Ser Asp Ala Ser Arg Gly Ser Ser Gly Ser Arg Ser Thr Ser Arg  
20 25 30

Glu Thr Arg Asp Gln Glu Gln Ser Gly Asp Gly Ser Arg His Ser Gly  
35 40 45

Ser

<210> 4  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 4

Ser Gln Asp Arg Asp Ser Gln Ala Gln Ser Glu Asp Ser Glu Arg Arg  
1 5 10 15

Ser Ala Ser Ala Ser Arg Asn His Arg Gly Ser Ala Gln Glu Gln Ser  
20 25 30

Arg Asp Gly Ser Arg  
35

<210> 5  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 5

Glu Gln Ser Ala Asp Ser Ser Arg His Ser Gly Ser Gly His  
1 5 10

<210> 6  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 6

Glu Ser Ser Arg Asp Gly Ser Arg His Pro Arg Ser His Asp  
1 5 10

<210> 7  
<211> 324  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> (3)..(3)  
<223> Y replaced by I

<220>  
<221> VARIANT  
<222> (12)..(12)  
<223> E replaced by D

<220>  
<221> VARIANT  
<222> (14)..(14)  
<223> S replaced by A or T

<220>  
<221> VARIANT  
<222> (17)..(17)  
<223> R replaced by Q or W

<220>  
<221> VARIANT  
<222> (18)..(18)  
<223> S replaced by A or T

<220>  
<221> VARIANT  
<222> (19)..(19)  
<223> G replaced by R, A or V

<220>  
<221> VARIANT  
<222> (20)..(20)  
<223> T replaced by P

<220>  
<221> VARIANT  
<222> (23)..(23)  
<223> G replaced by R

<220>  
<221> VARIANT  
<222> (24)..(24)

<223> G replaced by R

<220>

<221> VARIANT

<222> (29) .. (29)

<223> H replaced by R

<220>

<221> VARIANT

<222> (31) .. (31)

<223> E replaced by D or Q

<220>

<221> VARIANT

<222> (34) .. (34)

<223> R replaced by Q

<220>

<221> VARIANT

<222> (38) .. (38)

<223> R replaced by G

<220>

<221> VARIANT

<222> (41) .. (41)

<223> T replaced by A

<220>

<221> VARIANT

<222> (44) .. (44)

<223> E replaced by Q or D

<220>

<221> VARIANT

<222> (50) .. (50)

<223> H replaced by R

<220>

<221> VARIANT

<222> (51) .. (51)

<223> G replaced by A

<220>

<221> VARIANT

<222> (52) .. (52)

<223> H replaced by R

<220>  
<221> VARIANT  
<222> (55) .. (55)  
<223> S replaced by P

<220>  
<221> VARIANT  
<222> (56) .. (56)  
<223> S replaced by R

<220>  
<221> VARIANT  
<222> (57) .. (57)  
<223> S replaced by R

<220>  
<221> VARIANT  
<222> (58) .. (58)  
<223> G replaced by R

<220>  
<221> VARIANT  
<222> (61) .. (61)  
<223> Q replaced by H

<220>  
<221> VARIANT  
<222> (63) .. (63)  
<223> S replaced by Y

<220>  
<221> VARIANT  
<222> (64) .. (64)  
<223> H replaced by Y

<220>  
<221> VARIANT  
<222> (65) .. (65)  
<223> Y replaced by H

<220>  
<221> VARIANT  
<222> (68) .. (68)  
<223> S replaced by L

<220>  
<221> VARIANT  
<222> (69) .. (69)

<223> V replaced by A

<220>

<221> VARIANT

<222> (70)..(70)

<223> D replaced by N

<220>

<221> VARIANT

<222> (71)..(71)

<223> R replaced by S

<220>

<221> VARIANT

<222> (72)..(72)

<223> S replaced by T

<220>

<221> VARIANT

<222> (75)..(75)

<223> S replaced by R

<220>

<221> VARIANT

<222> (78)..(78)

<223> H replaced by Q

<220>

<221> VARIANT

<222> (80)..(80)

<223> S replaced by T

<220>

<221> VARIANT

<222> (84)..(84)

<223> S replaced by T

<220>

<221> VARIANT

<222> (92)..(92)

<223> H replaced by R

<220>

<221> VARIANT

<222> (94)..(94)

<223> T replaced by S, Q or H

<220>  
<221> VARIANT  
<222> (100)..(100)  
<223> A replaced by T

<220>  
<221> VARIANT  
<222> (103)..(103)  
<223> Q replaced by E or T

<220>  
<221> VARIANT  
<222> (105)..(105)  
<223> R replaced by H

<220>  
<221> VARIANT  
<222> (106)..(106)  
<223> N replaced by D

<220>  
<221> VARIANT  
<222> (107)..(107)  
<223> Q replaced by E or D

<220>  
<221> VARIANT  
<222> (114)..(114)  
<223> S replaced by T

<220>  
<221> VARIANT  
<222> (120)..(120)  
<223> R replaced by H

<220>  
<221> VARIANT  
<222> (126)..(126)  
<223> S replaced by T

<220>  
<221> VARIANT  
<222> (127)..(127)  
<223> R replaced by W or Q

<220>  
<221> VARIANT  
<222> (129)..(129)



<223> D replaced by E

<220>

<221> VARIANT

<222> (132)..(132)

<223> R replaced by G

<220>

<221> VARIANT

<222> (135)..(135)

<223> Q replaced by A

<220>

<221> VARIANT

<222> (136)..(136)

<223> V replaced by A or S

<220>

<221> VARIANT

<222> (137)..(137)

<223> G replaced by V

<220>

<221> VARIANT

<222> (140)..(140)

<223> E replaced by Q or D

<220>

<221> VARIANT

<222> (142)..(142)

<223> S replaced by A or E

<220>

<221> VARIANT

<222> (144)..(144)

<223> P replaced by S

<220>

<221> VARIANT

<222> (146)..(146)

<223> T replaced by R

<220>

<221> VARIANT

<222> (149)..(149)

<223> N replaced by R

<220>  
<221> VARIANT  
<222> (150)..(150)  
<223> Q replaced by W

<220>  
<221> VARIANT  
<222> (154)..(154)  
<223> F replaced by V

<220>  
<221> VARIANT  
<222> (158)..(158)  
<223> S replaced by R

<220>  
<221> VARIANT  
<222> (161)..(161)  
<223> Q replaced by E

<220>  
<221> VARIANT  
<222> (162)..(162)  
<223> G replaced by A

<220>  
<221> VARIANT  
<222> (163)..(163)  
<223> H replaced by Q or Y

<220>  
<221> VARIANT  
<222> (164)..(164)  
<223> S replaced by P

<220>  
<221> VARIANT  
<222> (170)..(170)  
<223> W replaced by R or H

<220>  
<221> VARIANT  
<222> (172)..(172)  
<223> G replaced by A or E

<220>  
<221> VARIANT  
<222> (179)..(179)

<223> H replaced by R

<220>

<221> VARIANT

<222> (182)..(182)

<223> A replaced by S

<220>

<221> VARIANT

<222> (183)..(183)

<223> Q replaced by R or W

<220>

<221> VARIANT

<222> (186)..(186)

<223> S replaced by L

<220>

<221> VARIANT

<222> (189)..(189)

<223> G replaced by V

<220>

<221> VARIANT

<222> (194)..(194)

<223> R replaced by G, S or T

<220>

<221> VARIANT

<222> (197)..(197)

<223> Q replaced by H, D or E

<220>

<221> VARIANT

<222> (200)..(200)

<223> R replaced by T

<220>

<221> VARIANT

<222> (202)..(202)

<223> G replaced by S

<220>

<221> VARIANT

<222> (204)..(204)

<223> G replaced by R or V

<220>  
<221> VARIANT  
<222> (205)..(205)  
<223> H replaced by Q or D

<220>  
<221> VARIANT  
<222> (207)..(207)  
<223> A replaced by S

<220>  
<221> VARIANT  
<222> (208)..(208)  
<223> D replaced by E or P

<220>  
<221> VARIANT  
<222> (209)..(209)  
<223> S replaced by V

<220>  
<221> VARIANT  
<222> (210)..(210)  
<223> S replaced by R or Q

<220>  
<221> VARIANT  
<222> (211)..(211)  
<223> R replaced by S, D or Q

<220>  
<221> VARIANT  
<222> (212)..(212)  
<223> Q replaced by D or S

<220>  
<221> VARIANT  
<222> (215)..(215)  
<223> T replaced by R

<220>  
<221> VARIANT  
<222> (216)..(216)  
<223> R replaced by H

<220>  
<221> VARIANT  
<222> (217)..(217)

<223> H replaced by A

<220>

<221> VARIANT

<222> (218)..(218)

<223> T replaced by A or E

<220>

<221> VARIANT

<222> (219)..(219)

<223> Q replaced by E

<220>

<221> VARIANT

<222> (220)..(220)

<223> T replaced by N or S

<220>

<221> VARIANT

<222> (223)..(223)

<223> G replaced by R

<220>

<221> VARIANT

<222> (224)..(224)

<223> G replaced by R

<220>

<221> VARIANT

<222> (226)..(226)

<223> A replaced by T

<220>

<221> VARIANT

<222> (230)..(230)

<223> H replaced by Q

<220>

<221> VARIANT

<222> (236)..(236)

<223> S replaced by R

<220>

<221> VARIANT

<222> (237)..(237)

<223> A replaced by P

<220>  
<221> VARIANT  
<222> (239)..(239)  
<223> D replaced by E

<220>  
<221> VARIANT  
<222> (244)..(244)  
<223> G replaced by H

<220>  
<221> VARIANT  
<222> (245)..(245)  
<223> H replaced by Y or Q

<220>  
<221> VARIANT  
<222> (255)..(255)  
<223> S replaced by A

<220>  
<221> VARIANT  
<222> (256)..(256)  
<223> G replaced by A

<220>  
<221> VARIANT  
<222> (257)..(257)  
<223> I replaced by T

<220>  
<221> VARIANT  
<222> (259)..(259)  
<223> H replaced by R

<220>  
<221> VARIANT  
<222> (264)..(264)  
<223> S replaced by T

<220>  
<221> VARIANT  
<222> (267)..(267)  
<223> R replaced by S

<220>  
<221> VARIANT  
<222> (269)..(269)

<223> S replaced by R

<220>

<221> VARIANT

<222> (274)..(274)

<223> S replaced by Y

<220>

<221> VARIANT

<222> (275)..(275)

<223> S replaced by R

<220>

<221> VARIANT

<222> (280)..(280)

<223> S replaced by T

<220>

<221> VARIANT

<222> (282)..(282)

<223> N replaced by Q or S

<220>

<221> VARIANT

<222> (288)..(288)

<223> D replaced by N

<220>

<221> VARIANT

<222> (291)..(291)

<223> T replaced by S

<220>

<221> VARIANT

<222> (295)..(295)

<223> S replaced by A

<220>

<221> VARIANT

<222> (296)..(296)

<223> A replaced by G

<220>

<221> VARIANT

<222> (297)..(297)

<223> H replaced by Q

<220>  
<221> VARIANT  
<222> (298)..(298)  
<223> G replaced by R

<220>  
<221> VARIANT  
<222> (301)..(301)  
<223> G replaced by R

<220>  
<221> VARIANT  
<222> (302)..(302)  
<223> S replaced by P

<220>  
<221> VARIANT  
<222> (303)..(303)  
<223> H replaced by R

<220>  
<221> VARIANT  
<222> (304)..(304)  
<223> Q replaced by H

<220>  
<221> VARIANT  
<222> (305)..(305)  
<223> Q replaced by E

<220>  
<221> VARIANT  
<222> (306)..(306)  
<223> S replaced by A

<220>  
<221> VARIANT  
<222> (311)..(311)  
<223> T replaced by A

<220>  
<221> VARIANT  
<222> (314)..(314)  
<223> R replaced by Q

<220>  
<221> VARIANT  
<222> (316)..(316)



<223> R replaced by Q, A or G

<220>

<221> VARIANT

<222> (317)..(317)

<223> G replaced by E

<220>

<221> VARIANT

<222> (318)..(318)

<223> R replaced by T, G or S

<400> 7

Phe	Leu	Tyr	Gln	Val	Ser	Thr	His	Glu	Gln	Ser	Glu	Ser	Ser	His	Gly
1				5					10					15	
Arg	Ser	Gly	Thr	Ser	Thr	Gly	Gly	Arg	Gln	Gly	Ser	His	His	Glu	Gln
			20					25					30		
Ala	Arg	Asp	Ser	Ser	Arg	His	Ser	Thr	Ser	Gln	Glu	Gly	Gln	Asp	Thr
		35					40					45			
Ile	His	Gly	His	Pro	Gly	Ser	Ser	Gly	Gly	Arg	Gln	Gly	Ser	His	
	50					55				60					
Tyr	Glu	Gln	Ser	Val	Asp	Arg	Ser	Gly	His	Ser	Gly	Ser	His	His	Ser
65					70					75					80
His	Thr	Thr	Ser	Gln	Gly	Arg	Ser	Asp	Ala	Ser	His	Gly	Thr	Ser	Gly
				85					90					95	
Ser	Arg	Ser	Ala	Ser	Arg	Gln	Thr	Arg	Asn	Gln	Glu	Gln	Ser	Gly	Asp
			100					105					110		
Gly	Ser	Arg	His	Ser	Gly	Ser	Arg	His	His	Glu	Ala	Ser	Ser	Arg	Ala
		115					120					125			
Asp	Ser	Ser	Arg	His	Ser	Gln	Val	Gly	Gln	Gly	Glu	Ser	Ser	Gly	Pro
	130					135					140				
Arg	Thr	Ser	Arg	Asn	Gln	Gly	Ser	Ser	Phe	Ser	Gln	Asp	Ser	Asp	Ser
145				150					155						160
Gln	Gly	His	Ser	Glu	Asp	Ser	Glu	Arg	Trp	Ser	Gly	Ser	Ala	Ser	Arg
				165				170					175		
Asn	His	His	Gly	Ser	Ala	Gln	Glu	Gln	Ser	Arg	Asp	Gly	Ser	Arg	His
			180				185						190		
Pro	Arg	Ser	His	Gln	Glu	Asp	Arg	Ala	Gly	His	Gly	His	Ser	Ala	Asp
		195					200					205			
Ser	Ser	Arg	Gln	Ser	Gly	Thr	Arg	His	Thr	Gln	Thr	Ser	Ser	Gly	Gly

210

215

220

Gln Ala Ala Ser Ser His Glu Gln Ala Arg Ser Ser Ala Gly Asp Arg  
 225 230 235 240

His Gly Ser Gly His Gln Gln Ser Ala Asp Ser Ser Arg His Ser Gly  
 245 250 255

Ile Gly His Gly Gln Ala Ser Ser Ala Val Arg Asp Ser Gly His Arg  
 260 265 270

Gly Ser Ser Gly Ser Gln Ala Ser Asp Asn Glu Gly His Ser Glu Asp  
 275 280 285

Ser Asp Thr Gln Ser Val Ser Ala His Gly Gln Ala Gly Ser His Gln  
 290 295 300

Gln Ser His Gln Glu Ser Thr Arg Gly Arg Ser Arg Gly Arg Ser Gly  
 305 310 315 320

Arg Ser Gly Ser

*B2*  
*conclude*